

**Notice of Allowability**

Application No.

10/632,233

Applicant(s)

OLKER ET AL.

Examiner

Art Unit

DIANE D. MIZRAHI

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8-11-06.
2. ☒ The allowed claim(s) is/are 1-48.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                   |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>8-14-2006</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                                     |
|   | 9. <input type="checkbox"/> Other _____   |

**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney David Rodack August 1, 2006.

**The application has been amended as follows:**

1. (Currently amended) A method for migrating file locks from one server to another comprising:

receiving a file lock indicator from a primary server, the file lock indicator representative of a granted file lock;

recording the file lock indicator; and

dynamically conveying the file lock indicator to an adoptive server when the primary server is unavailable, the adoptive server configured to use the file lock indicator to honor a request for access to data corresponding to the granted file lock.

2. (Original) The method of Claim 1 wherein receiving a file lock indicator comprises:

monitoring a file lock data-store on a primary server; and

retrieving a client file lock indicator from the file lock data-store when a new client file lock indicator is detected in the file lock data-store.

3. (Original) The method of Claim 2 wherein monitoring a file lock data-store comprises monitoring a network file system status monitor directory.

4. (Original) The method of Claim 1 wherein recording the file lock indicator comprises copying a client file lock description file to a predetermined data-store.

5. (Original) The method of Claim 1 wherein recording the file lock indicator comprises creating a file lock record according to a client file lock description file.

6. (Original) The method of Claim 1 wherein conveying the file lock indicator to an adoptive server comprises placing a client file lock indicator in a file lock data-store on an adoptive server.

7. (Original) The method of Claim 6 wherein placing a client file lock indicator in a file lock data-store comprises copying

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a client file lock description file from a predetermined data-store to a network file system status monitor directory on an adoptive server.

8. (Original) The method of Claim 6 wherein placing a client file lock indicator in a file lock data-store comprises:

retrieving a file lock record;

creating a client file lock description file according to the file lock record; and

storing the client file lock description file in a network file system status monitor

directory on an adoptive server.

9. (Original) The method of Claim 1 further comprising forcing the adoptive server to recognize the conveyed file lock indicator.

10. (Original) The method of Claim 9 wherein forcing the adoptive server to recognize the conveyed file lock indicator comprises at least one of restarting a network file system, restarting a network file system file lock manager and its associated file lock monitor and triggering a file lock recovery sequence.

11. (Currently amended) A file lock migration unit comprising:

data storage unit; and

file lock monitor comprising:

file lock receiver capable of receiving a file lock indicator from a primary server and storing said file lock indicator in the data storage unit, the file lock indicator representative of a granted file lock; and

file lock conveyance unit capable of dynamically conveying the file lock indicator from the data storage unit to an adoptive server when the primary server is unavailable, the adoptive server configured to use the file lock indicator to honor a request for access to data corresponding to the granted file lock.

12. (Original) The file lock migration unit of Claim 11 wherein the file lock receiver comprises:

detector capable of monitoring a file lock data-store on a primary server; and

retrieval unit capable of retrieving a client file lock indicator from the file lock data-store on the primary server when a new client file lock indicator is detected in the file lock data store on the primary server.

13. (Original) The file lock migration unit of Claim 12 wherein the detector monitors a network file system status monitor directory.

14. (Original) The file lock migration unit of Claim 11 wherein the file lock receiver comprises a retrieval unit capable of copying a client file lock description file to the data storage unit.

15. (Original) The file lock migration unit of Claim 11 wherein the file lock receiver comprises a retrieval unit capable of reading a client file lock description file and generating a file lock record according to the client file lock description file.

16. (Original) The file lock migration unit of Claim 11 wherein the file lock conveyance unit places a client file lock indicator in a file lock data-store on an adoptive server.

17. (Original) The file lock migration unit of Claim 11 wherein the file lock conveyance unit copies a client file lock

description file from the data storage unit to a file lock data-store on an adoptive server.

18. (Original) The file lock migration unit of Claim 11 wherein the file lock conveyance unit generates a client file lock description file according to a file lock record retrieved from the data storage unit and places the client file lock description file in a file lock data-store on an adoptive server.

19. (Original) The file lock migration unit of Claim 11 further comprising a restart unit capable of forcing the adoptive server to recognize a conveyed file lock indicator.

20. (Original) The file lock migration unit of Claim 19 wherein the restart unit is capable of sending to the adoptive server at least one of a network file system restart command, a network file system lock management and lock status restart command and a network file system file lock recovery sequence trigger command.

21. (Currently amended) A file lock migration system comprising:

processor capable of executing instructions; and

file migration instruction sequence, that when executed by the processor, minimally causes the processor to:

- receive a file lock indicator from a primary server,
- the file lock indicator representative of a granted file lock;
- record the file lock indicator in a first predetermined data-store; and
- dynamically convey the file lock indicator to a second predetermined data-store when the primary server is unavailable,
- the file lock indicator accessed from the second predetermined data-store to honor a request for access to data corresponding to the granted file lock.

22. (Original) The file lock migration system of Claim 21 wherein the file migration instruction sequence comprises a file lock receiver instruction sequence that, when executed by the processor, minimally causes the processor to:

- monitor a file lock data-store on a primary server; and
- retrieve a client file lock indicator when a new client file lock indicator is detected in the file lock data-store on the primary server.

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23. (Original) The file lock migration system of Claim 22 wherein the file lock receiver instruction sequence causes the processor to monitor a file lock data store on a primary server by minimally causing the processor to monitor a network file system status monitor directory.

24. (Original) The file lock migration system of Claim 21 wherein the file migration instruction sequence causes the processor to record the file lock indicator by minimally causing the processor to:

read a client file lock description file; and

write the client file lock description file to a first predetermined data-store.

25. (Original) The file lock migration system of Claim 21 wherein the file migration instruction sequence causes the processor to record the file lock indicator by minimally causing the processor to:

read a client file lock description file;

create a client file lock record according to the client file lock description file; and

write the client file lock record to a first predetermined data-store.

26. (Original) The file lock migration system of Claim 21 wherein the file migration instruction sequence causes the processor to convey the file lock indicator to a second predetermined data-store by minimally causing the processor to place a client file lock indicator in a file lock data-store on an adoptive server.

27. (Original) The file lock migration system of Claim 21 wherein the file migration instruction sequence causes the processor to convey the file lock indicator to a second predetermined data-store by minimally causing the processor to copy a client file lock description file from the first predetermined data-store to a network file system status monitor directory.

28. (Original) The file lock migration system of Claim 21 wherein the file migration instruction sequence causes the processor to convey the file lock indicator to a second predetermined data-store by minimally causing the processor to:

retrieve a client file lock record from the first predetermined data-store;

create a client file lock description file according to the client file lock record; and

store the created client file lock description file in a network file system status monitor directory.

29. (Original) The file lock migration system of Claim 21 wherein the file migration instruction sequence further comprises a restart instruction sequence that, when executed by the processor, minimally causes the processor to force a network file system to recognize a conveyed file lock indicator.

30. (Original) The file lock migration system of Claim 21 wherein the file migration instruction sequence further comprises a restart instruction sequence that, when executed by the processor, minimally causes the processor to dispatch to a network file system process at least one of a network file system restart command, a network file system lock manager and lock status monitor restart command and a network file system file lock recovery sequence trigger command.

31. (Currently amended) A computer-readable storage medium having computer-executable functions for migrating file locks from one server to another comprising:

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file migration instruction sequence, that when executed by a processor, minimally causes the processor to:

receive a file lock indicator from a primary server,  
the file lock indicator representative of a granted file lock;

record the file lock indicator in a first predetermined data-store; and

dynamically convey the file lock indicator to a second predetermined data-store when the primary server is unavailable,  
the file lock indicator accessed from the second predetermined data-store to honor a request for access to data corresponding to the granted file lock.

32. (Previously presented) The computer readable storage medium of Claim 31 wherein the file migration instruction sequence comprises a file lock receiver instruction sequence that, when executed by a processor, minimally causes the processor to:

monitor a file lock data-store on a primary server; and

retrieve a client file lock indicator when a new client file lock indicator is detected in the file lock data-store on the primary server.

33. (Previously presented) The computer readable storage medium of Claim 32 wherein the file lock receiver instruction sequence

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causes a processor to monitor a file lock data store on a primary server by minimally causing the processor to monitor a network file system status monitor directory.

34. (Previously presented) The computer readable storage medium of Claim 31 wherein the file migration instruction sequence causes the processor to record the file lock indicator by minimally causing the processor to:

- read a client file lock description file; and

- write the client file lock description file to a first predetermined data-store.

35. (Previously presented) The computer readable storage medium of Claim 31 wherein the file migration instruction sequence causes a processor to record the file lock indicator by minimally causing the processor to:

- read a client file lock description file;

- create a client file lock record according to the client file lock description file; and

- write the client file lock record to a first predetermined data-store.

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36. (Previously presented) The computer readable storage medium of Claim 31 wherein the file migration instruction sequence causes the processor to convey the file lock indicator to a second predetermined data-store by minimally causing the processor to place a client file lock indicator in a file lock data-store on an adoptive server.

37. (Previously presented) The computer readable storage medium of Claim 31 wherein the file migration instruction sequence causes the processor to convey the file lock indicator to a second predetermined data-store by minimally causing the processor to copy a client file lock description file from the first predetermined data-store to a network file system status monitor directory.

38. (Previously presented) The computer readable storage medium of Claim 31 wherein the file migration instruction sequence causes the processor to convey the file lock indicator to a second predetermined data-store by minimally causing the processor to:

retrieve a client file lock record from the first predetermined data-store;

create a client file lock description file according to the client file lock record; and

store the created client file lock description file in a network file system status monitor directory.

39. (Previously presented) The computer readable storage medium of Claim 31 wherein the file migration instruction sequence further comprises a restart instruction sequence that, when executed by the processor, minimally causes the processor to force a network file system to recognize a conveyed file lock indicator.

40. (Previously presented) The computer readable storage medium of Claim 31 wherein the file migration instruction sequence further comprises a restart instruction sequence that, when executed by the processor, minimally causes the processor to dispatch to a network file system process at least one of a network file system restart command, a network file system lock manager and lock status monitor restart command and a network file system file lock recovery sequence trigger command.

41. (Currently amended) An apparatus for migrating file locks from one server to another comprising:

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means for receiving a file lock indicator from a primary server, the file lock indicator representative of a granted file lock;

means for recording the file lock indicator; and

means for dynamically conveying the file lock indicator to an adoptive server when the primary server is unavailable, the adoptive server configured to use the file lock indicator to honor a request for access to data corresponding to the granted file lock.

42. (Original) The apparatus of Claim 41 wherein the means for receiving a file lock indicator comprises:

means for monitoring a file lock data-store on a primary server; and

means for retrieving a client file lock indicator from the file lock data-store when a new client file lock indicator is detected in the file lock data-store.

43. (Original) The apparatus of Claim 42 wherein the means for monitoring a file lock data-store comprises a means for monitoring a network file system status monitor directory.

44. (Original) The apparatus of Claim 41 wherein the means for recording the file lock indicator comprises a means for copying a client file lock description file to a predetermined data-store.

45. (Original) The apparatus of Claim 41 wherein the means for recording the file lock indicator comprises a means for creating a client file lock record according to a client file lock description file.

46. (Original) The apparatus of Claim 41 wherein the means for conveying the file lock indicator to an adoptive server comprises a means for placing a client file lock indicator in a file lock data store on an adoptive server.

47. (Original) The apparatus of Claim 41 wherein the means for conveying the file lock indicator to an adoptive server comprises a means for copying a client file lock description file from a predetermine data-store to a network file system status monitor directory on an adoptive server.

48. (Original) The apparatus of Claim 41 wherein the means for conveying the file lock indicator to an adoptive server comprises:

means for retrieving a file lock record;  
creating a client file lock description file; and  
storing the created client file lock description file in a network file system status monitor directory on an adoptive server.

**Allowable Subject Matter**

Claims 1-48 are allowed over the prior art made of record.

**Comments**

The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. In no case may an applicant reply outside the SIX (6) MONTH statutory period or obtain an extension for more than FIVE (5) MONTHS beyond the date for reply set forth in an Office action. A fully responsive reply must be timely filed to avoid abandonment of this application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

As allowable subject matter has been indicated, Applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP section 707.07(a).

**Other Prior Art Made of Record**

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. U.S. patents and U.S. patent application publications will not be supplied with Office actions. Examiners advises the Applicant that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site ([www.uspto.gov](http://www.uspto.gov)), from the Office of Public Records and from commercial sources. For the use of the Office's PAIR system, Applicants may refer to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

**Conclusion**

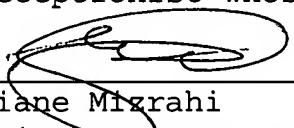
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane D.

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Mizrahi whose telephone number is 571-272-4079. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 305-3900 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
\_\_\_\_\_  
Diane Mizrahi  
Primary Patent Examiner  
Technology Center 2100

August 11, 2006